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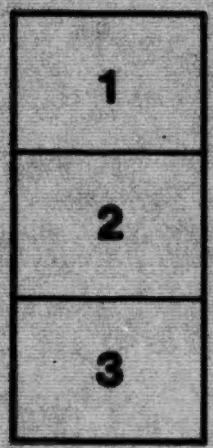

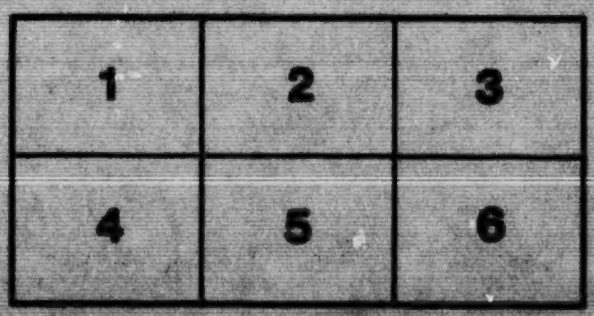

Government of the Province of Saskatchewan

DEPARTMENT OF AGRICULTURE

Breeding, Feeding and Management of Swine

Despite market fluctuations, hard times, high feed prices, middlemen's profits, disease and various other adverse conditions and influences, the fact remains that, in Western Canada today, hogs are a profitable investment to the average farmer who gives them a permanent place on the farm, houses them reasonably well and breeds and feeds with an average amount of common sense. For the live stock speculator who plunges in hogs when markets are high and stampedes to sell out when prices are low there is no money in hogs and never will be, nor, for that matter, in any other class of live stock.

That a man to be successful with any line of work must stay with the job, is as true in connection with hog raising as with anything else. The fellow who is always changing never makes much progress. No man can anticipate the high markets or the low ones, but the man who is always in the business is sure to reap profits when the other fellow is short, that is, when the demand is greater than the supply.

The farmers of Ontario grew wheat until they found they could no longer grow it successfully. Then they went into beef raising, dairying and hog raising, with the result that today many of the mortgages have been raised, better buildings erected and many other improvements made They have established a permanent system of agriculture, and hog raising forms part of this system.

REGARDING HOG PRODUCTION.

Numerous startling statistics have been published showing enormous increases in short periods of time, showing also immense profits and in general pointing to an easy road to riches by means of the humble hog. Without quoting any of these it may be conservatively stated that hogs increase rapidly and mature early; that they do not require elaborate housing; will consume and make profitable a large amount of material about the farm that would otherwise be wasted; and that they bring quick returns and can be fitted to bring them at a time or times when there is no income from any other source.

In Saskatchewan today we can grow the feeds that are most suitable to the production of the highest priced pork; our climate is such as to be essentially favourable to hog production and, as compared with any other hog producing country, we have a remarkably clean bill of health.

SELECTION OF TYPE AND BREED.

There is much controversy in this province as to whether the lard or bacon hog is the more profitable. In this regard we may quote from a recent Dominion Bulletin: "Until the swine raisers in Canada adopted the bacon type as their model, Canadian pork products possessed a very indifferent reputation. Since then a valuable export trade has been built up. In competition with the finest bacon in the world Canadian bacon commands a price on the British market very close to the top. Its excellence has appealed also to the home con-

sumer, until the Canadian market is able to absorb a larger and larger proportion, so that less and less can be spared for the export trade. For this reason there should be no relaxation on the part of the breeder to adhere to the bacon model in his breeding and feeding operations.

"Hogs, like other classes of live stock, must be judged, first, from the standpoint of the market, and secondly, from their adaptability to yield profitable returns for food consumed. Form, condition and weight largely determine the appreciation of the market, while on constitution, nervous temperament and feeding qualities depend the thrift or ability to convert the maximum of large quantities of food into a valuable marketable product.

"Happily, in the raising of swine for the bacon industry the interests of the producer and consumer in no way conflict. It was for a time contended by many farmers that it cost more to produce the bacon hog than the animal of the thick fat type. The results obtained at experiment stations, supported by the experience of many extensive and successful breeders, have all gone to show that, if anything, the contrary is true. In experiments by Professor Day, at the Ontario Agricultural College, out of six groups of pigs, the groups scored first and third by the packer on the basis of their adaptability for the export trade were first and second in economy of gain."

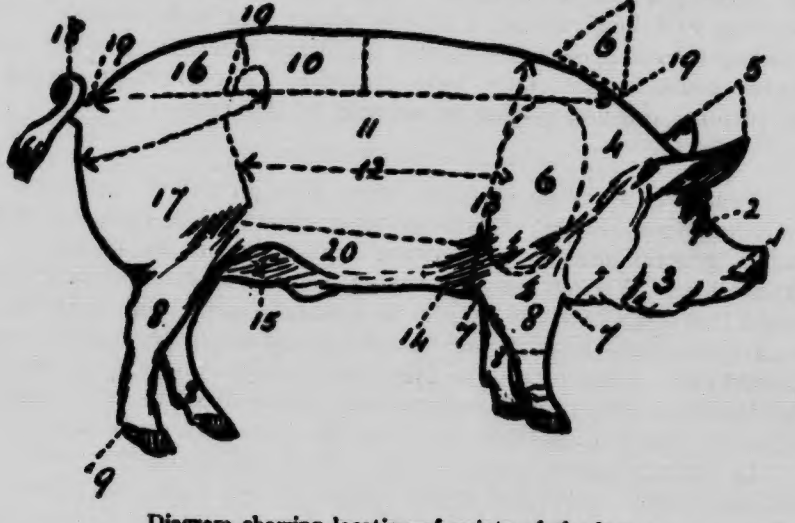

Diagram showing location of points of the hog.

1. Snout.	5. Ears.	9. Pastern.	13. Girth.	17. Ham.
2. Face.	6. Shoulder.	10. Loin.	14. Fore Flank.	18. Tail.
3. Jowl.	7. Chest.	11. Ribs.	15. Hind Flank.	19. Back.
4. Neck.	8. Leg.	12. Side.	16. Rump.	20. Belly.

Added to the above it might be stated that farmers in Western Canada cannot compete successfully in the production of lard hogs with farmers resident in the corn belt of the United States; but they can, do, and will produce bacon successfully and profitably in competition with swine raisers anywhere on the globe, owing largely to the fact that the feeds produced in Western Canada are pre-eminently suited to the production of the bacon hog. The Yorkshire, Tamworth and bacon type Berkshire are the leading bacon breeds.

BACON TYPE.

The hog required for the production of the highest class, high priced bacon is a smooth, trim, evenly developed pig of great length, fair depth and moderate thickness, with a uniform development of muscle giving an even covering of flesh throughout. In weight he should run from 170 to 225 pounds alive, and must be smooth and uniform all through. In detail the bacon type hog should possess the following characteristics:

Head.—Snout, medium length, not coarse; ear of fine texture, well placed and alertly carried; eye, large, prominent and bright, but not staring; jowl, trim and neat. Neck of medium length without distinctive muscular crest.

Forequarters.—Shoulder, compact on top and smooth at sides, should be no wider than rest of body or back, should be upright and well set forward to give length of side; breast moderately wide, deep and full; fore legs, set straight under body and of medium length, with straight, strong pasterns and clean quality bone.

Body.—Back of medium, but uniform width throughout, with gentle arch from back of head to tail, evenly muscled, should resemble an inverted capital "U"; loin, wide, strong and well covered; side, long, smooth and deep, but depth should be due to length of rib rather than excess of belly meat; fore rib, well sprung and deep; fore flank well filled behind the shoulder; hind flank well let down; underline, neat, not sagging and flabby.

Hindquarters.—Rump well carried out, of uniform width, carrying out gentle arch by drooping gradually from loin to tail; ham should be firm and heavily muscled, tapering gradually to hock, loose folds are objectionable; hind legs should be of medium length, set under body, but well apart, with clean bone and straight, strong pasterns.

As will be seen from the foregoing, length coupled with fair depth of side are essential in the bacon hog; but no matter how long in body it may be, if it has long, coarse legs and a narrow, cramped chest it is an undesirable type, and animals of this class should not be used for breeding purposes. From the packer's standpoint a bacon hog cannot have too long a side; but there is a tendency to obtain this at the expense of constitution, which, from the standpoint of both breeder and feeder, is essential.

COMMUNITY BREEDING.

It is not possible for every farmer to keep pure bred hogs, but it is imperative that every swine breeder worthy of the name should use a pure bred sire of approved bacon type.

It is a decided advantage where the farmers of a locality sink their personal likes and dislikes and raise the same breed and type of hogs, as the district obtains a reputation for producing a large number of hogs of that breed; individual breeders in the district may purchase high priced boars and interchange with their neighbours, which will avoid inbreeding; they are also in a position to place a uniform shipment on the market and will command a higher price for their hogs than would be the case if the farmers of the district raised various breeds and shipped all types, sizes and colours.

SELECTING A SIRE.

The sire selected should not only represent one of the bacon breeds, but should be in itself an individual of approved bacon type, possessing, in addition to the bacon requirements, masculinity; strong constitution, as shown by width and depth of chest and body, and large heart girth (this is essential); a strong, evenly muscled back, with gentle arch from back of head to tail; quality, as shown by a clean cut, trim appearance, with no sign of coarseness in bone, skin or hair; should have limbs set properly under the body, with strong, upright pasterns, and should be alert and active. If of breeding age the boar selected should be a proven sire.

SELECTING A SOW.

The desirable characteristics of the sow are: A lean, clean head; light, firm jowl; strong, straight pasterns and rather light shoulders; long, deep side; hind quarters well carried out, well developed hams. She should be long in the body with a gentle arch of back from the head to the tail; should have a moderately wide, deep chest and be well filled at the fore flank, and she should have at least twelve teats. Vicious, nervous or clumsy sows should be butchered, not kept for breeding purposes.

GENERAL BREEDING QUESTIONS.

Having selected the breeding stock the next question is: One or two litters a year, which? The swine breeder who specialises in this work, who has ample accommodation and is prepared to devote a certain amount of time to his hogs during the busy season on the farm can raise two litters profitably without reducing the standard of his stock nor running the risk of losing too many young pigs. For the average farmer who keeps a few hogs as an adjunct to other operations in mixed farming, the slogan should be "one litter and one litter well raised." The period of gestation in the sow is, roughly speaking, three months, three weeks and three days, or from 112 to 115 days. When one litter is raised, the month of May is probably the most suitable time at which to have the sow farrow. For this purpose the sow should be bred during the latter part of January or early in February. When two litters are required, the sows should be bred to farrow early in April and October. Sows should not be bred before they are nine months old and ten months is still better as it permits of greater development before the strain of nourishing a litter is put upon them.

METHODS OF BREEDING.

There are three recognised methods of breeding, the breeding of pure breds, cross breeding, and the breeding of grades. Taking up the work strictly from a commercial standpoint it might be stated that pure breds require no more feed or attention than grades and are more liable to produce in kind, but they require larger initial capital. Cross breeding consists of breeding a pure bred sire of one breed to a pure bred sow of another breed. The advantages of this lie in the fact that the offspring of the *first cross* are generally more vigorous and better feeders, but should not be kept for breeding stock. *Never go beyond the first cross.*

Grade breeding consists of the use of a pure bred boar on common sows. This is the system generally followed. The man who cannot afford to pay from twenty to thirty dollars for a pure bred sire, or a dollar for the use of one, should go out of hog raising, for he will never make it a success.

General rules for breeding are:

1. Use only a mature pure bred boar (not less than eight months old).
2. Do not breed the sows until they are at least nine months old.
3. Never inbreed.
4. Never use an undesirable type of sire. Life is too short to commit intentional mistakes.
5. Let every sire purchased be an improvement on his predecessor.
6. With a heavy boar and young sows, use a breeding crate.
7. Never use vicious or nervous pigs of either sex for breeding purposes.

CARE OF BOAR.

A boar should not be used for service until he is eight months old, and even then he should be used as little as possible until he is a year old. Four or five sows per week are sufficient for boars over eighteen months of age, and no two should be bred the same day. One service to a sow is always sufficient. Exercise is essential to the health of the boar, summer and winter. In summer a pasture lot with some protection from the sun should be given; in winter a roomy pen with an outside yard if possible. Boars should neither be starved nor kept too fat if they are to prove of the greatest value as sires. In summer the pasture and green feed may be supplemented with oat chop. In winter equal parts oat and barley chop make a good ration. Milk, roots, alfalfa or even well cured hay are all good supplementary feeds. The pasture lot may be seeded heavily to barley or have a strip of rape sown on it.

CARE OF SOW.

Pregnant sows must have abundance of exercise, without this *they will not raise healthy, profitable litters.* In summer they should be allowed to run in a pasture lot where ample shade is provided. In winter the method advocated by the most successful breeders is to place the sows in a shed or "A" shaped, colony hog pen over which a straw pile has been blown. They can be kept in this by means of a double fence of portable hurdles, one to hold the snow, and the other to hold the hogs. In any case, a roomy, dry, sheltered spot with plenty of bedding is essential, and the more voluntary exercise the sows take the better the results.

Sows should not be kept too fat and it is not advisable to feed them any great quantity of starchy or oily feed.

In summer the pasture may be supplemented by oat chop or a mixture of oat and barley chop in the proportion of half and half or three to one of oats and barley respectively. The grain should not be chopped too finely. Such supplementary feeds as green corn, roots, pigweed, or, in fact, any palatable roughage will help to keep

the sow in good condition. See that they have plenty of water, especially in hot weather. In winter, whole or crushed barley may be fed, spread on the ground so that the sows will take exercise feeding. Vary the feed occasionally with a feed of oats, small wheat, crushed screenings or any other grain. Do not feed flax in any quantity. Grain fed in winter may be crushed but, for breeding sows, it is not necessary to chop it. A pile of sods should be cut during the summer and piled near the hog pen. Throw in one or two of these every second day. Green hay, alfalfa, and roots of almost any kind help to keep the blood cool and the animal in good condition. If kept indoors, a mixture of sulphur and wood ashes or charcoal should be kept in the pen as a sort of tonic mixture. This is a good corrective. Above everything, avoid dark, damp, poorly ventilated quarters. Sows will stand dry cold but will not stand dampness or foul quarters. Keep the sows in thrifty condition *but not fat.* See that they get plenty of water or, where possible, skim milk or buttermilk, but, especially in winter, do not mix with the grain feed. If the sows are in good condition the grain ration may be extremely small at first. The quantity fed will depend entirely on the condition of the sows.

THE FARROWING PEN.

A farrowing pen should be roomy, dry and well ventilated. A guard rail should be provided to prevent the sow crushing the little pigs against the wall when she lies down. A two by eight plank fastened edgeways from eight to ten inches above the floor will answer this purpose. A small amount of short bedding should be left in the pen. The heavier and fatter the sow the less the amount of bedding. A raised platform in the farrowing pen insures a dry bed. This should not be less than seven by five feet. If possible, have the farrowing pen away from the rest of the pigs.

FARROWING.

As the time of farrowing approaches the grain ration should be slightly increased, but for forty-eight hours immediately prior to the expected time the ration should be very light. A record should always be kept of the service date so that the date of farrowing will be known in advance and the necessary precautions taken. As a general rule, there will be milk in the udder of the sow from twelve to twenty-four hours before she pigs. From two to three days before the due date the sow should be given a purgative dose of Epsom Salts. About three ounces of Epsom Salts to every one hundred pounds live weight. This may be mixed with a bran mash or in wet feed. Be sure that the sow does not become constipated. A small amount of flax seed in the grain ration will help to keep the bowels normal. (Avoid any sudden change of feed.) Accustom the sow to being handled.

AFTER FARROWING.

If the sow is in good condition no feed should be given for at least twelve hours after farrowing, and she should not be disturbed. The first meal should consist of hot, thin bran slop. Do not give cold water for at least twenty-four hours. For the first three or four

days care should be taken not to overfeed. After this, gradually increase the ration. The amount fed will depend on the size and condition of the sow and the number of living pigs in the litter. Oat chop, soaked in water or milk, is a first-class feed for the nursing sow. The trough should be so fixed that the young pigs cannot feed with the sow. This may be done by fastening a piece of six-inch plank all around it. Slop and green feed or roots in small quantities will help to keep the nursing sow in good condition. If the udder becomes hard and inflamed bathe with hot water and then rub in equal parts lard and turpentine. When the pigs are weaned reduce the feed. Whole oats, fed dry are a good weaning food. If a heavy milker, the young pigs may be weaned gradually. Sows which eat their pigs, unless very valuable, should be butchered.

CARE OF YOUNG PIGS.

If young pigs are strong and the sow quiet there should be no need of interference. They should be allowed to suck as soon as possible especially if the pen is chilly. Young pigs that become chilled should be rolled in a hot blanket and placed in a box near the stove until the sow settles down after farrowing. In extreme cases they may be placed in hot water up to the neck, for several minutes, and then dried and rolled in a hot blanket. If the water treatment is used, care should be taken that they are not afterwards exposed to cold draughts. Pigs learn to eat at from two to three weeks old. Skim milk with a few shorts stirred in are best for early feeding, the amount of shorts may be increased as the pigs grow. If oat chop is fed the hulls should be sifted out as they irritate the digestive tract and cause diarrhoea.

Young pigs should not be allowed to feed with the sow. A small trough may be placed in one corner of the pen and barred off so that the young pigs can get to it but not the sow. It is essential that young pigs have lots of exercise. For this purpose the sow should be turned out in an outside pen or runway for from two to four hours every day after the pigs are from ten days to two weeks old. Castration should be performed from ten days to two weeks before weaning. The usual time of weaning is when the pigs are from eight to ten weeks old. Remember that young pigs may get too fat. Thumps, a serious disease, is caused by lack of exercise and heavy nourishment. This almost always affects the best and fattest pigs.

AFTER WEANING.

Shorts and skim milk make the best feeds for young growing pigs. If no skim milk can be had, scald the shorts by pouring boiling water over them and letting them stand several hours in a covered vessel. Feed often for ten days after weaning—at least four times a day. The young pigs should have the run of a fairly large outside pen with shelter provided. It is advisable to have barley, rape or alfalfa sown in this or near it and some should be fed every day. If in rape do not let the pigs run when the rape is wet with dew or rain.

Above all, *keep the young pigs growing.* Well begun is half done. No animal shows care or the lack of it more quickly than the

young pig. No man ever made money out of pigs that were starved or spoiled when young.

Keep the pen clean—bed well, feed well and they will pay well.

FEEDING.

The aim of the swine breeder should be to produce a pig weighing from 175 to 200 pounds at from six to eight months of age. As a general rule more heating [illegible] starchy foods may be safely fed in the winter than in the summer. Remember the cheaper you can produce pork, the more profitable will your pigs prove. Feeds such as roots, rape, alfalfa and millet have all their place in summer fattening and roots and alfalfa can be profitably utilised in winter.

Never feed more than the pigs will clean up. The success of a feeder is gauged by his ability to just feed slightly less than the full amount the animals would eat. Never have feed left in the trough. Feed regularly—vary the feed as much as possible, but make no sudden changes.

Keep the pens clean, dry and well bedded—Saskatchewan produces lots of cheap bedding. See that the hog pen is well ventilated and not foul and steaming every morning. Do not overcrowd the pens. If the hogs get lousy they should be scrubbed with some coal tar dip and warm water. Kreso, Zenoleum, or, in fact, any of the standard dips or disinfectants, will serve. Repeat the process in ten days.

THINGS TO REMEMBER.

1. Feed regularly.
2. Keep troughs empty.
3. Keep pens dry, clean, well bedded and well ventilated.
4. Produce pork as cheaply as possible by the aid of alfalfa, rape, roots, etc.
5. Keep the pigs growing.
6. The younger the pig the quicker it grows and the more economical the gain.
7. The profitable pig is the quick growing, early maturing, bacon hog.

SOME DON'TS.

1. Don't feed the hogs only once a day.
2. Don't let them go thirsty (even though the bars are closed).
3. Don't put them in an open pen without shade.
4. Don't be a scrub producer.
5. Don't be stingy with the bedding. You are hog enough to like a good bed yourself.
6. Don't try to make money by growing pork at eight cents and selling at six. Cheapen your production.
7. Don't try to feed scrubby or stunted pigs. You are wasting feed and time.
8. Don't forget to sow some alfalfa.

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